EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

2.   Authorization for this examiner's amendment was given in a telephone interview with

Robert Kowert (Reg No. 39,255) on July 7, 2011.

3.   The claims have been amended as follows:

      a.   Claim 18, line 13, delete "specific integrated Web Service business system,

wherein" and insert -- specific integrated Web Service business system and in accordance

with one or more Web Services integration design patterns, and wherein --.

      b.   Claim 31: replace claim 31 with the following:

31.   An integrated Web Services business system, comprising:

one or more computers configured to implement:

      a plurality of heterogeneous business components of the integrated Web Services
          business system;

      a plurality of integration tiers of the integrated Web Services business system,
          wherein the plurality of integration tiers comprises a client tier, a
          presentation tier, a business tier, an integration tier, and a resources tier;

and

an integrated Web Service comprising one or more Web Services technologies for the integrated Web Services business system, wherein the integrated Web Service is configured to provide interoperability among the plurality of heterogeneous business components via a network;

wherein the integrated Web Services business system is configured and implemented according to an integrated Web Service architecture generated by a computer-implemented integrated Web Services architecture design service according to a structured integration methodology for designing and generating integrated Web Service architectures for integrating Web Services technologies with business systems comprising heterogeneous components such that:

a logical architecture for the integrated Web Service is defined according to business scenarios modeled by one or more Use Cases defined for the integrated Web Service, wherein each Use Case models a particular business scenario for the integrated Web Service, and wherein the logical architecture comprises two or more layers;

the plurality of heterogeneous business components are organized according to the plurality of integration tiers and the two or more layers of the logical architecture for the integrated Web Service; and

one or more design patterns including one or more Web Services integration design patterns for integrating Web Services with business systems are applied to the integrated Web Service architecture, wherein each design pattern models a particular structure that is applicable to the integrated Web Service.

c.   Claim 42: replace claim 42 with the following:

42.   A system for integrating Web Services with business systems, comprising:

computer-implemented means for obtaining one or more use case requirements, wherein
        each use case requirement specifies a particular business scenario for an
        integrated Web Service, and wherein at least one of the one or more use case
        requirements is defined in accordance with at least one Web Services integration
        design pattern;

computer-implemented means for generating an integrated Web Services architecture in
        accordance with the one or more use case requirements and in accordance with
        one or more design patterns including one or more Web Services integration
        design patterns, wherein the integrated Web Services architecture integrates a
        Web Service with a business system comprising a plurality of heterogeneous
        components;

computer-implemented means for applying a Web Services structured methodology and
        the one or more design patterns to the integrated Web Service architecture to
        identify a plurality of integrated Web Service components including one or more
        of the business system components and to organize the integrated Web Service
        components according to the integrated Web Service architecture, wherein the
        plurality of integrated Web Service components are organized according to two or
        more integration tiers and two or more layers of the integrated Web Service
        architecture;

wherein said computer-implemented means for applying a Web Services structured
        methodology and the one or more design patterns to the generated integrated Web
        Service architecture comprises means for providing integration and
        interoperability with the integrated Web Service architecture for existing business

functionality of the business system;

computer-implemented means for providing output indicating the generated integrated Web Service architecture for integrating the Web Service with the business system; and

means for implementing the integrated Web Service comprising the plurality of integrated Web Service components organized according to the integrated Web Service architecture.

d.   Claim 58, lines 7-8, delete "for the specific integrated Web Service business system, wherein" and insert -- for the specific integrated Web Service business system and in accordance with one or more Web Services integration design patterns, and wherein --.

e.   Claim 82: line 7, delete "integrated Web Service business system, wherein" and insert -- integrated Web Service business system and in accordance with one or more Web Services integration design patterns, and wherein --.

Reasons for Allowance

4.   The following is an examiner's statement of reasons for allowance: the prior art of record fails to teach or suggest the claimed invention. Specifically, the prior art of record fails to teach or suggest a generating one or more Use Cases for an integrated Web Service in accordance with the one or more Web Services integration design patterns, generating a high-level architecture for the integrated Web Service in accordance to the one or more Web Services integration

design, or applying the Web Service design patterns to an integrated Web Service architecture

generated by a integrated Web Services architecture design service as recited in the independent

claims.

5.   The prior art of record, Curry and Epionet teaches a computer-implemented method of

generating an integrated web service including generating use cases, a high-level architecture,

and a logical architecture, identifying logical components of the integrated Web Service

architecture, categorizing the Web Service components into two or more related groups, defining

a plurality of integration tiers and one or more Web Services technologies, defining how each of

the plurality of integration tiers communicates with others of the plurality of integration tiers,

implementing a plurality of heterogeneous business components of the integrated Web Services

business system. The prior art of record, Siegel, teaches translating one or more use case

requirements and one or more technical constraints to determine a plurality of Web Services

components for an integrated Web Service architecture. The prior art of record, Curtis teaches a

method for separating an integrated management architecture into tiers, including a client tier, a

presentation tier, a business tier, an integration tier, and a resources tier. The prior art of record,

Huang, teaches four design patterns for integrated web services. However, the cited references

do not specifically teach or provide motivation for modifying the method of defining an

integrated Web Service as taught by Curry, Epionet, Siegel, and Curtis, with the design patterns

of Huang.

6.   Any comment considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jue S. Wang whose telephone number is (571) 270-1655. The

examiner can normally be reached on M-F 9:30 am - 5:00pm (EST).

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Lewis Bullock can be reached on 571-272-3759. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lewis A. Bullock, Jr./   /Jue Wang/
Supervisory Patent Examiner, Art Unit 2193   Examiner, Art Unit 2193